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| <b>UTILITY<br/>PATENT APPLICATION<br/>TRANSMITTAL</b><br><br>(Only for new nonprovisional applications under 37 CFR 1.53(b)) |  | Attorney Docket No. <b>GNN-010CPDV</b>   |  |
|  |  | First Inventor <b>Vincent Ling</b>   |  |
|  |  | Title <b>METHODS OF PREVENTING IMMUNE-MEDIATED ABORTION BY INHIBITING A CD28-MEDIATED COSTIMULATORY SIGNAL</b> |  |
|  |  | Express Mail Label No. <b>EL 931 676 365 US</b>  |  |

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| <b>APPLICATION ELEMENTS</b><br><br>See MPEP chapter 600 concerning utility patent application contents. | <b>ADDRESS TO:</b> MS Patent Application<br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria, VA 22313-1450 |
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| 1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17)<br>(Submit an original, and a duplicate for fee processing)<br>2. <input type="checkbox"/> Applicant claims small entity status.<br>See 37 CFR 1.27.<br>3. <input checked="" type="checkbox"/> Specification [Total Pages <b>62</b> ]<br>(preferred arrangement set forth below)<br>- Descriptive title of the invention<br>- Cross Reference to Related Applications<br>- Statement Regarding Fed sponsored R & D<br>- Reference to sequence listing, a table, or a computer program listing appendix<br>- Background of the Invention<br>- Brief Summary of the Invention<br>- Brief Description of the Drawings (if filed)<br>- Detailed Description<br>- Claim(s)<br>- Abstract of the Disclosure<br>4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets <b>28</b> ]<br>5. Oath or Declaration [Total Sheets <b>6</b> ]<br>a. <input type="checkbox"/> Newly executed (original or copy)<br>b. <input checked="" type="checkbox"/> Copy from a prior application (37 CFR 1.63(d))<br>(for continuation/divisional with Box 18 completed)<br>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b><br>Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).<br>6. <input checked="" type="checkbox"/> Application Data Sheet. See 37 CFR 1.76 | 7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)<br>8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)<br>a. <input type="checkbox"/> Computer Readable Form (CRF)<br>b. Specification Sequence Listing on:<br>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or ii. <input checked="" type="checkbox"/> Paper<br>c. <input checked="" type="checkbox"/> Statements verifying identity of above copies<br><b>ACCOMPANYING APPLICATIONS PARTS</b><br>9. <input type="checkbox"/> Assignment Papers (cover sheet & document(s))<br>10. <input type="checkbox"/> 37 CFR 3.73(b) Statement (when there is an assignee) <input type="checkbox"/> Power of Attorney<br>11. <input type="checkbox"/> English Translation Document (if applicable)<br>12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations<br>13. <input type="checkbox"/> Preliminary Amendment<br>14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized)<br>15. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed)<br>16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.<br>17. <input checked="" type="checkbox"/> Other: <b>Copy of Assignment to Genetics Institute, Inc., recorded 1/16/01, Reel 011444, Frame 0267</b> |
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18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☒ Divisional ☐ Continuation-in-part (CIP) of prior application No.: **09/628129**

Prior application information: Examiner **Jessica H. Roark** Art Unit: **1644**

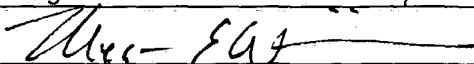
For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

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| Name (Print/Type) | <b>Megan E. Williams</b>  | Registration No. (Attorney/Agent) | <b>43,270</b>        |
| Signature         |  | Date                              | <b>June 27, 2003</b> |

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EL 931 676 365 US, in an envelope addressed to: MS Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: June 27, 2003

Signature: 

(Megan E. Williams, Ph.D.)

10/609218



06/27/03

13049 U.S. PTO  
06/27/03

PTO/SB/17 (05-03)  
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| <h1 style="text-align: center;">FEE TRANSMITTAL</h1> <h2 style="text-align: center;">for FY 2003</h2> <p style="text-align: center;"><i>Effective 01/01/2003, Patent fees are subject to annual revision.</i></p> |  | <b>Complete if Known</b> |                       |             |
|   |  | Application Number       | Not Yet Assigned      |             |
|   |  | Filing Date              | Concurrently Herewith |             |
|   |  | First Named Inventor     | Vincent Ling          |             |
|   |  | Examiner Name            | Jessica H. Roark      |             |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27  |  | Art Unit                 | 1644                  |             |
| TOTAL AMOUNT OF PAYMENT (\$)  |  | 1,048.00                 | Attorney Docket No.   | GNN-010CPDV |

| <b>METHOD OF PAYMENT</b> (check all that apply)   |          | <b>FEE CALCULATION</b> (continued)  |          |  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
|---|----------|---|----------|--|----------|-----------------|----------|-----------------|----------|----------|----------|----------|----------|------|-----|------------------------|--------|-------------------------------------|-----|------|-----|-----------------------------------|----|---|-----|------|-----|---------------------------------------|-----|---------------------------|-----|------|-------|--|-------|---|-----|------|------|--|------|--|--|------|--------|------|--------|---|--|--------------|-----|--------------|----|--|--|----------|-----|------|---------|---|---|-------|-----|-------|-----|--|--------|------|-------|------|-----|---|--|--------------------|-------|------|-----|--|---|--------|-----|------|-----|------------------|--|------|-----|------|-----|--|--|------|-----|------|-----|--------------------------|--|------|-------|------|-------|---|--|------|-----|------|----|----------------------------------|--|------|-------|------|-----|------------------------------------|--|------|-------|------|-----|--------------------------------|--|------|-----|------|-----|------------------|--|------|-----|------|-----|-----------------|--|------|-----|------|-----|-------------------------------|--|------|----|------|----|-------------------------------------|--|------|-----|------|-----|---|--|------|----|------|----|--|--|------|-----|------|-----|---|--|------|-----|------|-----|---|--|------|-----|------|-----|---|--|------|-----|------|-----|---|--|---------------------|--|--|--|--|--|--------------------------|--|--|--|------------------------|--|
| <input type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input type="checkbox"/> None<br><input checked="" type="checkbox"/> Deposit Account<br>Deposit Account Number: 12-0080<br>Deposit Account Name: Lahive & Cockfield, LLP<br>The Director is hereby authorized to: (check all that apply)<br><input checked="" type="checkbox"/> Charge fee(s) indicated below <input checked="" type="checkbox"/> Credit any overpayments<br><input checked="" type="checkbox"/> Charge any additional fee(s) during the pendency of this application<br><input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.   |          | <b>3. ADDITIONAL FEES</b><br><table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>1051</td><td>130</td><td>2051</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>1052</td><td>50</td><td>2052</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet.</td><td></td></tr> <tr><td>1053</td><td>130</td><td>1053</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>1812</td><td>2,520</td><td>1812</td><td>2,520</td><td>For filing a request for ex parte reexamination</td><td></td></tr> <tr><td>1804</td><td>920*</td><td>1804</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>1805</td><td>1,840*</td><td>1805</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>1251</td><td>110</td><td>2251</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>1252</td><td>410</td><td>2252</td><td>205</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>1253</td><td>930</td><td>2253</td><td>465</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>1254</td><td>1,450</td><td>2254</td><td>725</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>1255</td><td>1,970</td><td>2255</td><td>985</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>1401</td><td>320</td><td>2401</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>1402</td><td>320</td><td>2402</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>1403</td><td>280</td><td>2403</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>1451</td><td>1,510</td><td>1451</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>1452</td><td>110</td><td>2452</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>1453</td><td>1,300</td><td>2453</td><td>650</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>1501</td><td>1,300</td><td>2501</td><td>650</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>1502</td><td>470</td><td>2502</td><td>235</td><td>Design issue fee</td><td></td></tr> <tr><td>1503</td><td>630</td><td>2503</td><td>315</td><td>Plant issue fee</td><td></td></tr> <tr><td>1460</td><td>130</td><td>1460</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>1807</td><td>50</td><td>1807</td><td>50</td><td>Processing fee under 37 CFR 1.17(q)</td><td></td></tr> <tr><td>1806</td><td>180</td><td>1806</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>8021</td><td>40</td><td>8021</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>1809</td><td>750</td><td>2809</td><td>375</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>1810</td><td>750</td><td>2810</td><td>375</td><td>For each additional invention to be examined (37CFR 1.129(b))</td><td></td></tr> <tr><td>1801</td><td>750</td><td>2801</td><td>375</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>1802</td><td>900</td><td>1802</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr> <td colspan="4">Other fee (specify)</td> <td></td> <td></td> </tr> <tr> <td colspan="4">           SUBTOTAL (1) (\$) 750.00         </td> <td colspan="2">           SUBTOTAL (3) (\$) 0.00         </td> </tr> </tbody> </table> |          | Large Entity   |          | Small Entity    |          | Fee Description | Fee Paid | Fee Code | Fee (\$) | Fee Code | Fee (\$) | 1051 | 130 | 2051                   | 65     | Surcharge - late filing fee or oath |     | 1052 | 50  | 2052                              | 25 | Surcharge - late provisional filing fee or cover sheet. |     | 1053 | 130 | 1053                                  | 130 | Non-English specification |     | 1812 | 2,520 | 1812   | 2,520 | For filing a request for ex parte reexamination |     | 1804 | 920* | 1804   | 920* | Requesting publication of SIR prior to Examiner action |  | 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action   |  | 1251         | 110 | 2251         | 55 | Extension for reply within first month |  | 1252     | 410 | 2252 | 205     | Extension for reply within second month |   | 1253  | 930 | 2253  | 465 | Extension for reply within third month |        | 1254 | 1,450 | 2254 | 725 | Extension for reply within fourth month |  | 1255               | 1,970 | 2255 | 985 | Extension for reply within fifth month |   | 1401   | 320 | 2401 | 160 | Notice of Appeal |  | 1402 | 320 | 2402 | 160 | Filing a brief in support of an appeal |  | 1403 | 280 | 2403 | 140 | Request for oral hearing |  | 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding |  | 1452 | 110 | 2452 | 55 | Petition to revive - unavoidable |  | 1453 | 1,300 | 2453 | 650 | Petition to revive - unintentional |  | 1501 | 1,300 | 2501 | 650 | Utility issue fee (or reissue) |  | 1502 | 470 | 2502 | 235 | Design issue fee |  | 1503 | 630 | 2503 | 315 | Plant issue fee |  | 1460 | 130 | 1460 | 130 | Petitions to the Commissioner |  | 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) |  | 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt |  | 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) |  | 1809 | 750 | 2809 | 375 | Filing a submission after final rejection (37 CFR 1.129(a)) |  | 1810 | 750 | 2810 | 375 | For each additional invention to be examined (37CFR 1.129(b)) |  | 1801 | 750 | 2801 | 375 | Request for Continued Examination (RCE) |  | 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application |  | Other fee (specify) |  |  |  |  |  | SUBTOTAL (1) (\$) 750.00 |  |  |  | SUBTOTAL (3) (\$) 0.00 |  |
| Large Entity  |          | Small Entity  |          | Fee Description  | Fee Paid |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| Fee Code  | Fee (\$) | Fee Code  | Fee (\$) |  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1051  | 130      | 2051  | 65       | Surcharge - late filing fee or oath  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1052  | 50       | 2052  | 25       | Surcharge - late provisional filing fee or cover sheet.                    |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1053  | 130      | 1053  | 130      | Non-English specification  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1812  | 2,520    | 1812  | 2,520    | For filing a request for ex parte reexamination                            |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1804  | 920*     | 1804  | 920*     | Requesting publication of SIR prior to Examiner action                     |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1805  | 1,840*   | 1805  | 1,840*   | Requesting publication of SIR after Examiner action                        |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1251  | 110      | 2251  | 55       | Extension for reply within first month                                     |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1252  | 410      | 2252  | 205      | Extension for reply within second month                                    |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1253  | 930      | 2253  | 465      | Extension for reply within third month                                     |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1254  | 1,450    | 2254  | 725      | Extension for reply within fourth month                                    |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1255  | 1,970    | 2255  | 985      | Extension for reply within fifth month                                     |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1401  | 320      | 2401  | 160      | Notice of Appeal   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1402  | 320      | 2402  | 160      | Filing a brief in support of an appeal                                     |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1403  | 280      | 2403  | 140      | Request for oral hearing   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1451  | 1,510    | 1451  | 1,510    | Petition to institute a public use proceeding                              |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1452  | 110      | 2452  | 55       | Petition to revive - unavoidable   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1453  | 1,300    | 2453  | 650      | Petition to revive - unintentional   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1501  | 1,300    | 2501  | 650      | Utility issue fee (or reissue)   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1502  | 470      | 2502  | 235      | Design issue fee   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1503  | 630      | 2503  | 315      | Plant issue fee  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1460  | 130      | 1460  | 130      | Petitions to the Commissioner  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1807  | 50       | 1807  | 50       | Processing fee under 37 CFR 1.17(q)  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1806  | 180      | 1806  | 180      | Submission of Information Disclosure Stmt                                  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 8021  | 40       | 8021  | 40       | Recording each patent assignment per property (times number of properties) |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1809  | 750      | 2809  | 375      | Filing a submission after final rejection (37 CFR 1.129(a))                |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1810  | 750      | 2810  | 375      | For each additional invention to be examined (37CFR 1.129(b))              |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1801  | 750      | 2801  | 375      | Request for Continued Examination (RCE)                                    |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1802  | 900      | 1802  | 900      | Request for expedited examination of a design application                  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| Other fee (specify)   |          |   |          |  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| SUBTOTAL (1) (\$) 750.00  |          |   |          | SUBTOTAL (3) (\$) 0.00   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| <b>1. BASIC FILING FEE</b><br><table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>1001</td><td>750</td><td>2001</td><td>375</td><td>Utility filing fee</td><td>750.00</td></tr> <tr><td>1002</td><td>330</td><td>2002</td><td>165</td><td>Design filing fee</td><td></td></tr> <tr><td>1003</td><td>520</td><td>2003</td><td>260</td><td>Plant filing fee</td><td></td></tr> <tr><td>1004</td><td>750</td><td>2004</td><td>375</td><td>Reissue filing fee</td><td></td></tr> <tr><td>1005</td><td>160</td><td>2005</td><td>80</td><td>Provisional filing fee</td><td></td></tr> <tr> <td colspan="4">SUBTOTAL (1)</td> <td>(\$)</td> <td>750.00</td> </tr> </tbody> </table>   |          | Large Entity  |          | Small Entity   |          | Fee Description | Fee Paid | Fee Code        | Fee (\$) | Fee Code | Fee (\$) | 1001     | 750      | 2001 | 375 | Utility filing fee     | 750.00 | 1002                                | 330 | 2002 | 165 | Design filing fee                 |    | 1003  | 520 | 2003 | 260 | Plant filing fee                      |     | 1004                      | 750 | 2004 | 375   | Reissue filing fee                                 |       | 1005  | 160 | 2005 | 80   | Provisional filing fee                                     |      | SUBTOTAL (1)   |  |      |        | (\$) | 750.00 | <b>2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE</b><br><table border="1"> <thead> <tr> <th colspan="2">Total Claims</th> <th colspan="2">Extra Claims</th> <th colspan="2">Fee from below</th> <th colspan="2">Fee Paid</th> </tr> </thead> <tbody> <tr> <td>21</td> <td>-20** =</td> <td>1</td> <td>x</td> <td>18.00</td> <td>=</td> <td>18.00</td> <td></td> </tr> <tr> <td>3</td> <td>-3** =</td> <td></td> <td>x</td> <td></td> <td>=</td> <td>0.00</td> <td></td> </tr> <tr> <td colspan="4">Multiple Dependent</td> <td>280.00</td> <td>=</td> <td>280.00</td> <td></td> </tr> </tbody> </table> |  | Total Claims |     | Extra Claims |    | Fee from below                         |  | Fee Paid |     | 21   | -20** = | 1                                       | x | 18.00 | =   | 18.00 |     | 3                                      | -3** = |      | x     |      | =   | 0.00                                    |  | Multiple Dependent |       |      |     | 280.00                                 | = | 280.00 |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| Large Entity  |          | Small Entity  |          | Fee Description  | Fee Paid |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| Fee Code  | Fee (\$) | Fee Code  | Fee (\$) |  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1001  | 750      | 2001  | 375      | Utility filing fee   | 750.00   |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1002  | 330      | 2002  | 165      | Design filing fee  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1003  | 520      | 2003  | 260      | Plant filing fee   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1004  | 750      | 2004  | 375      | Reissue filing fee   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1005  | 160      | 2005  | 80       | Provisional filing fee   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| SUBTOTAL (1)  |          |   |          | (\$)   | 750.00   |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| Total Claims  |          | Extra Claims  |          | Fee from below   |          | Fee Paid        |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 21  | -20** =  | 1   | x        | 18.00  | =        | 18.00           |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 3   | -3** =   |   | x        |  | =        | 0.00            |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| Multiple Dependent  |          |   |          | 280.00   | =        | 280.00          |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| <b>2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE</b><br><table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>1202</td><td>18</td><td>2202</td><td>9</td><td>Claims in excess of 20</td><td></td></tr> <tr><td>1201</td><td>84</td><td>2201</td><td>42</td><td>Independent claims in excess of 3</td><td></td></tr> <tr><td>1203</td><td>280</td><td>2203</td><td>140</td><td>Multiple dependent claim, if not paid</td><td></td></tr> <tr><td>1204</td><td>84</td><td>2204</td><td>42</td><td>** Reissue independent claims over original patent</td><td></td></tr> <tr><td>1205</td><td>18</td><td>2205</td><td>9</td><td>** Reissue claims in excess of 20 and over original patent</td><td></td></tr> <tr> <td colspan="4">SUBTOTAL (2)</td> <td>(\$)</td> <td>298.00</td> </tr> </tbody> </table> |          | Large Entity  |          | Small Entity   |          | Fee Description | Fee Paid | Fee Code        | Fee (\$) | Fee Code | Fee (\$) | 1202     | 18       | 2202 | 9   | Claims in excess of 20 |        | 1201                                | 84  | 2201 | 42  | Independent claims in excess of 3 |    | 1203  | 280 | 2203 | 140 | Multiple dependent claim, if not paid |     | 1204                      | 84  | 2204 | 42    | ** Reissue independent claims over original patent |       | 1205  | 18  | 2205 | 9    | ** Reissue claims in excess of 20 and over original patent |      | SUBTOTAL (2)   |  |      |        | (\$) | 298.00 | <b>3. ADDITIONAL FEES</b> (continued)   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| Large Entity  |          | Small Entity  |          | Fee Description  | Fee Paid |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| Fee Code  | Fee (\$) | Fee Code  | Fee (\$) |  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1202  | 18       | 2202  | 9        | Claims in excess of 20   |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1201  | 84       | 2201  | 42       | Independent claims in excess of 3  |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1203  | 280      | 2203  | 140      | Multiple dependent claim, if not paid                                      |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1204  | 84       | 2204  | 42       | ** Reissue independent claims over original patent                         |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| 1205  | 18       | 2205  | 9        | ** Reissue claims in excess of 20 and over original patent                 |          |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |
| SUBTOTAL (2)  |          |   |          | (\$)   | 298.00   |                 |          |                 |          |          |          |          |          |      |     |                        |        |                                     |     |      |     |                                   |    |   |     |      |     |                                       |     |                           |     |      |       |  |       |   |     |      |      |  |      |  |  |      |        |      |        |   |  |              |     |              |    |  |  |          |     |      |         |   |   |       |     |       |     |  |        |      |       |      |     |   |  |                    |       |      |     |  |   |        |     |      |     |                  |  |      |     |      |     |  |  |      |     |      |     |                          |  |      |       |      |       |   |  |      |     |      |    |                                  |  |      |       |      |     |                                    |  |      |       |      |     |                                |  |      |     |      |     |                  |  |      |     |      |     |                 |  |      |     |      |     |                               |  |      |    |      |    |                                     |  |      |     |      |     |   |  |      |    |      |    |  |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |      |     |      |     |   |  |                     |  |  |  |  |  |                          |  |  |  |                        |  |

|                   |                   |                                   |                |
|-------------------|-------------------|-----------------------------------|----------------|
| SUBMITTED BY      |                   | Complete (if applicable)          |                |
| Name (Print/Type) | Megan E. Williams | Registration No. (Attorney/Agent) | 43,270         |
| Signature         |                   | Telephone                         | (617) 227-7400 |
|                   |                   | Date                              | June 27, 2003  |

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EL 931 676 365 US, in an envelope addressed to: MS Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: June 27, 2003      Signature: (Megan E. Williams, Ph.D.)